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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

INVENTORSHIP ..... BADDING, John V. et al.  
U.S. SERIAL NO.....n/a  
PCT APPLICATION NO..... PCT/GB2004/004293  
INTERNATIONAL FILING DATE ..... 08 OCT. 2004  
PRIORITY DATE ..... 10 OCT. 2003  
ART UNIT ..... n/a  
ATTORNEY DOCKET NO. .... SO03-P05  
TITLE:       **SYNTHESIS OF GERMANIUM SULPHIDE AND RELATED  
              COMPOUNDS**

**INFORMATION DISCLOSURE STATEMENT**  
**PURSUANT TO 37 C.F.R. §§ 1.56, 1.97 AND 1.98**

The application being filed herewith is a U.S. National Stage filing based on PCT/GB2004/004293. In compliance with 37 C.F.R. §§ 1.56, 1.97 and 1.98, your attention is directed to the references listed on the attached Form PTO-1449. The references were cited (1) by the Applicants along with their PCT filing of the above referenced PCT patent application, and (2) by the European Patent Office ("EPO") in an International Search Report mailed to the Applicant's representative on 11 February 2005 for PCT Patent Application No. PCT/GB2004/004293, a copy of which is included herewith. Further, a copy of the Written Opinion of the ISA regarding PCT Patent Application No. PCT/GB2004/004293 is included herewith. No admission is made regarding whether the submitted references are prior art.

Respectfully submitted  
John V. BADDING, Daniel William HEWAK,  
and Chung-Che HUANG, assignors to the  
University of Southampton, all Applicants

Dated:       April 10, 2006

By: 

John S. Reid  
Attorney and agent for Applicants  
Reg. No.: 36,369



10 APR 2005

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PTO/SB/08B (08-03)

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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<p>Application Number</p> <p>Filing Date</p> <p>First Named Inventor</p> <p>Art Unit</p> <p>Examiner Name</p>	<p>Application Number</p>
	<p>Filing Date</p>
	<p>First Named Inventor</p> <p>BADDING, John V.</p>
	<p>Art Unit</p>
	<p>Examiner Name</p>
<p>Sheet 3 of 4</p>	<p>Attorney Docket Number</p> <p>SO03-P05</p>

## **NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	A	K. HIRAO et al, "Active Glasses for Functional Devices", Springe-Verlag, Berlin, Chapter 6, Pages 188-193	✓
	B	PETER J. MELLING, "Alternative Methods of Preparing Chalcogenide Glasses", Glass Division of the American Ceramic Society, 03-30-1984, Pgs 1427 - 29, Volume 63, No. 11 (1984)	✓
	C	TOSHIO KATSUYAMA et al, "Fabrication of High-Purity Chalcogenide Glasses by Chemical Vapor Deposition", 03-01-1986, Pgs 1446-49, J. Appl Phys. 59(5)	✓
	D	ANDREW N. MACINNES et al, "Chemical Vapor Deposition of Cubic Gallium Sulfide Thin Films: A New Metastable Phase", Pgs 11 - 14, Chem. Mater: 1992, 4	✓
	E	STEPHAN SCHULZ et al, "Synthesis of Gallium Chalcogenide Cubanes and Their Use as CVD Precursors for Ga(2) E(3) (E=S, Se), Pgs4880-83, 10-29-1996, Organometallics 15 (22)	✓
	F	H. TAWARAYAMA, "Fibre Amplifiers Based on Rare Earth-Doped Chalcogenide", D5.1 Pgs 355-57, March 1998, EMIS Datareviews Series, No 22	✓
	G	T. SCHWEIZER, "Fibre Lasers Based on Rare Earth-Doped Chalcogenide Glass", D5.2 Pgs 358-61, November 1997, EMIS Datareviews Series, No 22	✓
	H	I. ABDULALIM et al, "High Performance Acousto-Optic Chalcogenide Glass Based On Ga2S3-La2S3 Systems", Pgs 1251-54, 1993, J. Non-Crystalline Solids (1993)	✓
	I	CARMENT B. PEDROSO et al, "High Verdet Constant Ga:S:La:O Chalcogenide Glasses for Mageneto-Optical Devices", Pgs 214-19, Feb 1999, Optical Engineering Vol. 38	✓
	J	K. SHIMAKAWA, A. KOLOBOV, S.R. ELLIOT, "Photoinduced Effects and Metastability in Amorphous Semiconductors and Insulators", Pgs 475-588, 1995, Advances in Physics Vol 44 No. 6	✓

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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

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	K	MARCO PETROVICH et al, "Temperature Dependence of Reversible Photodarkening in Ga:La:S and Ga:La:S:O Glass Fibres", Pgs. 951-52, 07-06-2001, International Congress on Glass Vol 2, Edinburgh, Scotland	✓
	L	D.W. HALL et al, "Nonlinear Optical Susceptibilities of High-Index Glasses", Pgs 1293 - 95, April 1989, Appl. Phys. Lett. 54(14) April 1989	✓
	M	ALI SALIMINIA et al, "First - and Second-Order Bragg Gratings in Single-Mode Planar Waveguides of Chalcogenide Glasses", Pgs 838-42, 1999, J. Lightwave Tech Vol 17, No. 5, May 1999	✓
	N	MASAKI ASOBE et al, "Nonlinear Refractive Index Measurement in Chalcogenide-Glass Fibers by Self-Phase Modulation", Pgs 1153-54, 01-06-1992, Appl Phys Lett 60(10) 9 Mar 1992	✓
	O	B.L. SELEZNEV et al, "Chemical Sensors in Natural Water: Behavioral Features of Chalcogenide Glass Electrodes for Determining Copper, Lead, and Cadmium Ions", Pgs 813-17, 03-24-1995, J. Analytic Chemistry, Vol 51, No. 8 1996	✓
	P	T.A. BIRKS et al, "Four-Port Fiber Frequency Shifter With a Null Taper Coupler", Pgs 1964-66, 03-10-1994, Optics Letters, Vol. 19 No. 23, Dec. 1, 1994	✓
	Q	SEOK HYUN YUN, et al, "All-Fiber Acoustooptic Filter With Low-Polarization Sensitivity and No Frequency Shift, Pgs 461-63, April 1997, IEEE Photonics Technology Letters, Vol 9, No. 4 April 1997	✓
	R	TESTBOURNE LTD, "G3-10008-P-Germanium Sphide, Powder", Supervac Materials, Retrieved from the internet at URL: <a href="http://www.supervacmaterials.com/showpart.asp?code_number=G3-10008-P">http://www.supervacmaterials.com/showpart.asp?code_number=G3-10008-P</a>	✓
	S	Ir. R. C. SCHIMMEL, "Glass Technology, Online!", Pages 1-3, XP-002310681, Retrieved from the Internet at <a href="http://www.chem.tue.nl/glasstech/GLASSP7.htm">http://www.chem.tue.nl/glasstech/GLASSP7.htm</a>	✓
	T	D. Marchese, "Spectroscopic and Thermal Properties of GeS <sub>2</sub> -based Chalcogenide Glasses", 05-01-1996, Page 1, J. of Modern Optics, Vol 43 No 5. Retrieved online URL: <a href="http://taylorandfrancis.metapress.com/contributions.asp">http://taylorandfrancis.metapress.com/contributions.asp</a>	✓

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